=> Uploading C:\Program Files\Stnexp\Queries\09676487.str

L1 STRUCTURE UPLOADED

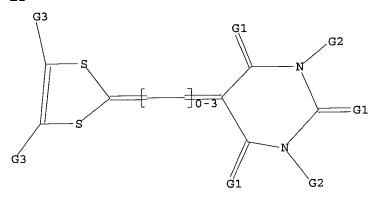
=> que L1

L2 QUE L1

=> d

L2 HAS NO ANSWERS

L1 STR



G1 0,S

G2 H, Cb, Hy, Ak, Ph

G3 H, Ak

Structure attributes must be viewed using STN Express query preparation. L2 QUE ABB=ON PLU=ON L1

=> s 12

SAMPLE SEARCH INITIATED 13:05:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED

5 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

5 TO 234

PROJECTED ANSWERS:

2 TO 124

L3

2 SEA SSS SAM L1

=> d

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN 231299-35-7 REGISTRY

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H22 N2 O4 S3

SR CA

LC STN Files: CA, CAPLUS

STURCH

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)

2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL USPATFULL CAPLUS HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.34

2.55

FILE 'USPATFULL' ENTERED AT 13:06:02 ON 04 DEC 2002 CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 13:06:02 ON 04 DEC 2002

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=> d his

(FILE 'HOME' ENTERED AT 13:04:46 ON 04 DEC 2002)

FILE 'REGISTRY' ENTERED AT 13:05:01 ON 04 DEC 2002

L1 STRUCTURE UPLOADED

QUE L1 L2

L3 2 S L2

FILE 'USPATFULL, CAPLUS, HCAPLUS' ENTERED AT 13:06:02 ON 04 DEC 2002

=> s 13

6 L3 L4

=> d l4 1-6 ibib abs hitstr

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS 2001:469363 CAPLUS

ACCESSION NUMBER:

135:84325

DOCUMENT NUMBER: TITLE:

Manufacture of lithographic plate by twice finishing

treatment

INVENTOR(S):

Shiraishi, Yuichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 20 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

ACCESSION NUMBER:

1995:711929 HCAPLUS

DOCUMENT NUMBER:

123:339823

TITLE:

A new access to 1,3-dithiol-2-ylidenes from

AUTHOR (S):

S-propargyl dithiocarbonates (xanthates) Boivin, Jean; Henriet, Eric B.; Zard, Samir Z.

Lab. Synthese Org. Associe, CNRS, Ecole Polytech.,

CORPORATE SOURCE:

Palaiseau, F-91128, Fr. Tetrahedron Letters (1995), 36(29), 5171-4

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER:

SOURCE:

Elsevier

Ι

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 123:339823

GI

Heating propargylic xanthates, e.g. CH2:CHCHMeC.tplbond.CCH2SC(C)OMe, in AΒ toluene or chlorobenzene in the presence of an active methylene compd., e.g., malononitrile, produces a 1,3-dithiol-2-ylidene, e.g. I, through a series of steps involving a betaine.

IT 170301-81-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of 1,3-dithiol-2-ylidenes from S-propargyl dithiocarbonates)

170301-81-2 HCAPLUS RN

2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(4-ethyl-1,3-dithiol-2-ylidene)-1,3-CN dimethyl- (9CI) (CA INDEX NAME)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001174979	A2	20010629	JP 1999-354446	19991214

GΙ

The lithog. plate, comprising a hydrophilized Al support coated with a photosensitive layer contg. a sensitizer and an alkali-sol. or swelling polymer having .gtoreq.2 of maleimide groups I (R1-2 = H, halo, alkyl, R1 and R2 may form a 5- or 6-membered ring) at the side chain , is exposed, developed, and finishing treated .gtoreq.2 times using the same or the different finishing solns. The lithog. plate shows high sensitivity, ink receiving property, and printing durability.

IT 231299-35-7

RL: DEV (Device component use); USES (Uses) (sensitizer; manuf. of lithog. plate contg. polymer with maleimide side chain by twice finishing treatment)

RN 231299-35-7 CAPLUS

Ι

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)

notonovalent

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:412775 CAPLUS

DOCUMENT NUMBER:

131:108959

TITLE:

Photosensitive composition containing

photocrosslinkable polymer and manufacture of

lithographic plate using it

INVENTOR(S):

Shiraishi, Yuichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174674	A2	19990702	JP 1997-340219	19971210

OTHER SOURCE(S): MARPAT 131:108959

AB The compn. contains a photocrosslinkable polymer with a maleimide group

and an acid group with dissocn. to an alk. aq. soln. in its side chain, a sensitizer, and .gtoreq.1 of alk. compds. XOH, X2CO3, XHCO3, NR3R4R5, Y(OH)2, and YCO3 [X = alkali metal, NR6R7R8R9; Y = alkali earth metal; R3-9 = H, (substituted) alkyl]. The acid group may be replaced by a group forming a salt from alkali metal salt, alkali earth metal salt, or ammonium salt NR6R7R8R9 [R6-9 = H, (substituted) alkyl]. The lithog. plate is manufd. by removing a photosensitive layer in unexposed areas with water or aq. soln. with pH of 3-11, after imagewise exposing the photosensitive layer contg. the obtained compn. The compn. enables to develop the printing plate with neutral water or aq. soln. instead of strong alk. aq. soln.

IT 231299-35-7P

CN

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(sensitizer; presensitized lithog. plate contg. photocrosslinkable polymer, sensitizer, and alk. compd.)

RN 231299-35-7 CAPLUS

1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:711929 CAPLUS

DOCUMENT NUMBER: 123:339823

TITLE: A new access to 1,3-dithiol-2-ylidenes from

S-propargyl dithiocarbonates (xanthates)

AUTHOR(S): Boivin, Jean; Henriet, Eric B.; Zard, Samir Z.

CORPORATE SOURCE: Lab. Synthese Org. Associe, CNRS, Ecole Polytech.,

Palaiseau, F-91128, Fr.

SOURCE: Tetrahedron Letters (1995), 36(29), 5171-4

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:339823

GT

AB Heating propargylic xanthates, e.g. CH2:CHCHMeC.tplbond.CCH2SC(C)OMe, in toluene or chlorobenzene in the presence of an active methylene compd., e.g., malononitrile, produces a 1,3-dithiol-2-ylidene, e.g. I, through a series of steps involving a betaine.

IT 170301-81-2P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of 1,3-dithiol-2-ylidenes from S-propargyl dithiocarbonates)

RN 170301-81-2 CAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(4-ethyl-1,3-dithiol-2-ylidene)-1,3-dimethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:469363 HCAPLUS

DOCUMENT NUMBER:

135:84325

TITLE:

Manufacture of lithographic plate by twice finishing

treatment

INVENTOR(S):

Shiraishi, Yuichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 20 pp.

\_\_\_\_\_

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001174979	A2	20010629	JP 1999-354446	19991214

GΙ

The lithog. plate, comprising a hydrophilized Al support coated with a photosensitive layer contg. a sensitizer and an alkali-sol. or swelling polymer having .gtoreq.2 of maleimide groups I (R1-2 = H, halo, alkyl, R1 and R2 may form a 5- or 6-membered ring) at the side chain , is exposed, developed, and finishing treated .gtoreq.2 times using the same or the different finishing solns. The lithog. plate shows high sensitivity, ink receiving property, and printing durability.

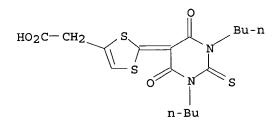
IT 231299-35-7

RL: DEV (Device component use); USES (Uses)

(sensitizer; manuf. of lithog. plate contg. polymer with maleimide side chain by twice finishing treatment)

RN 231299-35-7 HCAPLUS

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:412775 HCAPLUS

DOCUMENT NUMBER:

131:108959

TITLE:

Photosensitive composition containing

photocrosslinkable polymer and manufacture of

lithographic plate using it

INVENTOR(S):

Shiraishi, Yuichi

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 11174674 A2 19990702 JP 1997-340219 19971210

OTHER SOURCE(S): M

MARPAT 131:108959

The compn. contains a photocrosslinkable polymer with a maleimide group and an acid group with dissocn. to an alk. aq. soln. in its side chain, a sensitizer, and .gtoreq.1 of alk. compds. XOH, X2CO3, XHCO3, NR3R4R5, Y(OH)2, and YCO3 [X = alkali metal, NR6R7R8R9; Y = alkali earth metal; R3-9 = H, (substituted) alkyl]. The acid group may be replaced by a group forming a salt from alkali metal salt, alkali earth metal salt, or ammonium salt NR6R7R8R9 [R6-9 = H, (substituted) alkyl]. The lithog. plate is manufd. by removing a photosensitive layer in unexposed areas with water or aq. soln. with pH of 3-11, after imagewise exposing the photosensitive layer contg. the obtained compn. The compn. enables to develop the printing plate with neutral water or aq. soln. instead of strong alk. aq. soln.

IT 231299-35-7P

L4

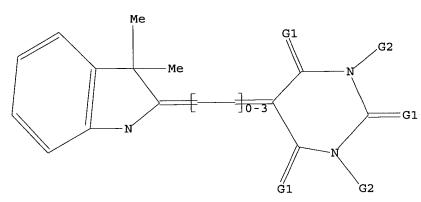
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(sensitizer; presensitized lithog. plate contg. photocrosslinkable polymer, sensitizer, and alk. compd.)

RN 231299-35-7 HCAPLUS

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)

=> d L8 HAS NO ANSWERS L5 SCR 963 L6 SCR 1821 OR 1822 OR 1823 OR 1824 L7 STR



G1 O,S G2 H,Cb,Hy,Ak,Ph G3 H,Ak

Structure attributes must be viewed using STN Express query preparation. L8 QUE ABB=ON PLU=ON L7 AND L5 AND L6

=> s 18 SAMPLE SEARCH INITIATED 13:11:11 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS SEARCH TIME: 00.00.01

3 ANSWERS

BEARCH TIME: 00:00:01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 22 TO 418 PROJECTED ANSWERS: 3 TO 163

L9 3 SEA SSS SAM L7 AND L5 AND L6

=> d

L9 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 183272-29-9 REGISTRY

CN 1,4-Benzenedisulfonic acid, 2-[5-[6-[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-2,4-hexadienylidene]tetrahydro-2,4,6-trioxo-3-(2-sulfoethyl)-1(2H)-pyrimidinyl]-, pentapotassium salt (9CI) (CA INDEX NAME)

MF C36 H37 N3 O18 S5 . 5 K

SR CA

LC STN Files: CA, CAPLUS

## ●5 K

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL USPATFULL CAPLUS HCAPLUS TOTAL SINCE FILE COST IN U.S. DOLLARS ENTRY SESSION 2.34 35.64 FULL ESTIMATED COST TOTAL SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SESSION ENTRY -3.72 0.00 CA SUBSCRIBER PRICE

FILE 'USPATFULL' ENTERED AT 13:11:22 ON 04 DEC 2002 CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE 'HCAPLUS' ENTERED AT 13:11:22 ON 04 DEC 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 19 L10 6 L9

=> d his

(FILE 'HOME' ENTERED AT 13:04:46 ON 04 DEC 2002)

FILE 'REGISTRY' ENTERED AT 13:05:01 ON 04 DEC 2002

L1 STRUCTURE UPLOADED

L2 QUE L1 L3 2 S L2

FILE 'USPATFULL, CAPLUS, HCAPLUS' ENTERED AT 13:06:02 ON 04 DEC 2002 L4 6 S L3

FILE 'HOME' ENTERED AT 13:07:59 ON 04 DEC 2002

FILE 'REGISTRY' ENTERED AT 13:10:01 ON 04 DEC 2002

L5 SCREEN 963

L6 SCREEN 1821 OR 1822 OR 1823 OR 1824

L7 STRUCTURE UPLOADED
L8 OUE L7 AND L5 AND L6

L9 3 S L8

FILE 'USPATFULL, CAPLUS, HCAPLUS' ENTERED AT 13:11:22 ON 04 DEC 2002 6 S L9

=> s 110 not 14

6 L10 NOT L4

=> d l11 1-6 ibib abs hitstr

L11 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS 1996:693723 CAPLUS

ACCESSION NUMBER:

125:312364

DOCUMENT NUMBER: TITLE:

L10

Silver halide photographic materials containing

hexamethinemerocyanine compounds

INVENTOR (S):

Sakurada, Masami; Oono, Shigeru Fuji Photo Film Co Ltd, Japan

PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 33 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08211552	A2	19960820	JP 1995-15010	19950201

GI

$$\mathbb{R}^2$$
  $\mathbb{R}^3$   $\mathbb{L}^3$   $\mathbb{L}^4$   $\mathbb{L}^5$   $\mathbb{L}^6$   $\mathbb{R}^2$   $\mathbb{R}^3$   $\mathbb{R}^2$   $\mathbb{R}^3$   $\mathbb{R}^2$   $\mathbb{R}^3$   $\mathbb$ 

The title materials comprise a hydrophilic colloid layer contg. .gtoreq.1 AB hexamethinemerocyanine compd. I [Z1 = nonmetal atoms required to form a benzo-condensed or naphtho-condensed ring; M = H, atoms or metal atom forming a monovalent cation; n = 1-3; R1-3 = (substituted) alkyl; L1-6 (substituted) methine group, the adjacent substituents may condensed to form a 5- or 6-membered ring; Z2 = atoms required to form a (substituted) heterocycle selected from pyrazolidinedion, isooxazolone, pyrazolopyridone, barbituric acid, pyridone, rhodanine]. The compds. are stable and water-sol. and provide photog. materials showing improved decoloring properties without adverse effects on the photog. properties.

Т

183272-29-9 TT

RL: DEV (Device component use); USES (Uses)

(Ag halide photog. materials contg. hexamethinemerocyanine compds.)

183272-29-9 CAPLUS RN

1,4-Benzenedisulfonic acid, 2-[5-[6-[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-CN sulfobutyl) -2H-benz[e]indol-2-ylidene]-2,4-hexadienylidene]tetrahydro-2,4,6-trioxo-3-(2-sulfoethyl)-1(2H)-pyrimidinyl]-, pentapotassium salt (9CI) (CA INDEX NAME)

## 5 K

L11 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2002 ACS 1996:640204 CAPLUS

ACCESSION NUMBER: 125:278576

DOCUMENT NUMBER:

Molecular hyperpolarizabilities of barbituric acid and TITLE:

cyclobutene-1,2-dione derivatives. Electronic and

steric effects

Cho, Bong Rae; Je, Jong Tae; Lee, Seung Jae; Lee, Sang AUTHOR(S):

Hae; Kim, Hyun Soo; Jeon, Seung Joon; Song, Ok-Keum;

Wang, C. H.

Department of Chemistry, Korea University, Seoul, CORPORATE SOURCE:

136-701, S. Korea

Journal of the Chemical Society, Perkin Transactions SOURCE:

2: Physical Organic Chemistry (1996), (10), 2141-2144

CODEN: JCPKBH; ISSN: 0300-9580

Royal Society of Chemistry PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

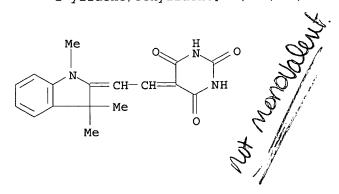
A series of merocyanine dyes contg. various donors and barbituric acid and cyclobutene-1,2-dione moieties as the acceptors have been synthesized and their first-order hyperpolarizabilities .beta. were detd. The .beta. values of the barbituric acid derivs. increase as the strength of the donor is increased from 4-(dimethylamino)phenyl to trimethylindolinyl to benzothiazolinyl, apparently due to the gradual decrease in the bond length alteration from a large pos. value to an optimum one by a stronger In contrast, the .beta. values for the cyclobutene-1,2-dione derivs. decrease with the same variation of the donors even though the cyclobutene-1,2-dione is a poorer acceptor than the barbituric acid moiety. The results have been attributed to the electron-donating ability of the donors and the increased distortion of the chromophores from planarity.

93818-94-1P IT

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (hyperpolarizabilities of merocyanines from barbituric acid and cyclobutenediones)

RN93818-94-1 CAPLUS

2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-CN 2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)



L11 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS

1963:426202 CAPLUS ACCESSION NUMBER:

59:26202 DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 59:4716e-g

Stereochemical factors affecting optical sensitization TITLE:

Anderson, G. de W. AUTHOR(S):

Imp. Chem. Inds. Ltd., Manchester, UK CORPORATE SOURCE:

Sci. Phot., Proc. Intern. Colloq., Liege (1962), 1959, SOURCE:

487-511 DOCUMENT TYPE: Journal Unavailable

LANGUAGE: For diagram(s), see printed CA Issue. GΙ

The formation of polymeric forms (J aggregates contg. at least 150 mols.) AB of sensitizing dyes in Ag halide emulsions is studied. The positions of

the absorption max. in MeOH and in the emulsion are given for a large no. of merocyanines. Symmetry of the terminal groups and, in general, redn.

of the no. of possible stereoisomers, promotes the J aggregation.

Electronic rather than structural symmetry is an essential, but not the sole requirement. Malononitrile dimethinemerocyanines with 2 stereo forms

show J-band aggregation. N,N'-Diethylthioharbituric acid dimethinemerocyanines show aggregation only when a single isomer is

possible. The no. of stereoisomers can be limited by enclosing the polymethine chain in a cyclic system. Even highly similar d and I forms

increase this no. and prevent J-band sensitization. A new 4,7'-quinocyanine of structure I is described.

93818-94-1, Barbituric acid, 5-[2-(1,3,3-trimethyl-2-

indolinylidene) ethylidene] -

(photographic sensitization by, stereoisomerism and)

93818-94-1 CAPLUS RN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-CN 2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)

L11 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:693723 HCAPLUS

125:312364 DOCUMENT NUMBER:

Silver halide photographic materials containing TITLE:

hexamethinemerocyanine compounds Sakurada, Masami; Oono, Shigeru Fuji Photo Film Co Ltd, Japan

PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 33 pp. SOURCE:

CODEN: JKXXAF

Patent DOCUMENT TYPE:

Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR(S):

KIND DATE APPLICATION NO. DATE PATENT NO. -----\_ \_ \_ \_ \_ - - - - - ------JP 1995-15010 19950201 JP 08211552 A2 19960820

IT

$$R^2$$
  $R^3$   $L^1L^2 = L^3L^4 = L^5L^6$   $R^2$   $R^3$   $R^2$   $R^3$   $R^2$   $R^3$   $R^2$   $R^3$   $R$ 

AB The title materials comprise a hydrophilic colloid layer contg. .gtoreq.1 hexamethinemerocyanine compd. I [Z1 = nonmetal atoms required to form a benzo-condensed or naphtho-condensed ring; M = H, atoms or metal atom forming a monovalent cation; n = 1-3; R1-3 = (substituted) alkyl; L1-6 (substituted) methine group, the adjacent substituents may condensed to form a 5- or 6-membered ring; Z2 = atoms required to form a (substituted) heterocycle selected from pyrazolidinedion, isooxazolone, pyrazolopyridone, barbituric acid, pyridone, rhodanine]. The compds. are stable and water-sol. and provide photog. materials showing improved decoloring properties without adverse effects on the photog. properties.

Ι

IT 183272-29-9

RL: DEV (Device component use); USES (Uses)

(Ag halide photog. materials contg. hexamethinemerocyanine compds.)

RN 183272-29-9 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[5-[6-[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-2,4-hexadienylidene]tetrahydro-2,4,6-trioxo-3-(2-sulfoethyl)-1(2H)-pyrimidinyl]-, pentapotassium salt (9CI) (CA INDEX NAME)

## ●5 K

L11 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1996:640204 HCAPLUS

DOCUMENT NUMBER:

125:278576

TITLE:

Molecular hyperpolarizabilities of barbituric acid and

cyclobutene-1,2-dione derivatives. Electronic and

steric effects

AUTHOR(S):

Cho, Bong Rae; Je, Jong Tae; Lee, Seung Jae; Lee, Sang

Hae; Kim, Hyun Soo; Jeon, Seung Joon; Song, Ok-Keum;

Wang, C. H.

CORPORATE SOURCE:

Department of Chemistry, Korea University, Seoul,

136-701, S. Korea

SOURCE:

Journal of the Chemical Society, Perkin Transactions

2: Physical Organic Chemistry (1996), (10), 2141-2144

CODEN: JCPKBH; ISSN: 0300-9580

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A series of merocyanine dyes contg. various donors and barbituric acid and

cyclobutene-1,2-dione moieties as the acceptors have been synthesized and their first-order hyperpolarizabilities .beta. were detd. The .beta. values of the barbituric acid derivs. increase as the strength of the donor is increased from 4-(dimethylamino)phenyl to trimethylindolinyl to benzothiazolinyl, apparently due to the gradual decrease in the bond length alteration from a large pos. value to an optimum one by a stronger donor. In contrast, the .beta. values for the cyclobutene-1,2-dione derivs. decrease with the same variation of the donors even though the cyclobutene-1,2-dione is a poorer acceptor than the barbituric acid moiety. The results have been attributed to the electron-donating ability of the donors and the increased distortion of the chromophores from planarity.

IT 93818-94-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (hyperpolarizabilities of merocyanines from barbituric acid and cyclobutenediones)

RN 93818-94-1 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)

L11 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1963:426202 HCAPLUS

DOCUMENT NUMBER: 59:26202

ORIGINAL REFERENCE NO.: 59:4716e-g

TITLE: Stereochemical factors affecting optical sensitization

AUTHOR(S): Anderson, G. de W.

CORPORATE SOURCE: Imp. Chem. Inds. Ltd., Manchester, UK

SOURCE: Sci. Phot., Proc. Intern. Colloq., Liege (1962), 1959,

487-511

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB The formation of polymeric forms (J aggregates contg. at least 150 mols.) of sensitizing dyes in Ag halide emulsions is studied. The positions of the absorption max. in MeOH and in the emulsion are given for a large no. of merocyanines. Symmetry of the terminal groups and, in general, redn. of the no. of possible stereoisomers, promotes the J aggregation. Electronic rather than structural symmetry is an essential, but not the sole requirement. Malononitrile dimethinemerocyanines with 2 stereo forms show J-band aggregation. N,N'-Diethylthioharbituric acid dimethinemerocyanines show aggregation only when a single isomer is possible. The no. of stereoisomers can be limited by enclosing the polymethine chain in a cyclic system. Even highly similar d and I forms increase this no. and prevent J-band sensitization. A new 4,7'-quinocyanine of structure I is described.

IT 93818-94-1, Barbituric acid, 5-[2-(1,3,3-trimethyl-2-indolinylidene)ethylidene]-

(photographic sensitization by, stereoisomerism and)

RN 93818-94-1 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)